

C51 Active Speaker Power Unit

5 channel pairs of amplification with modular line-level crossovers for Meridian installation speakers



Meridian's C Series offers a range of robust, precision-made audio/video components designed with the custom installation market in mind, extending Meridian's strong reputation for the highest possible audio and video quality into new areas.

The line includes power amplifiers, surround processors and all the building-blocks of a powerful system for custom installation applications. All are fitted with rack-mounting ears and are equipped with remote control capability where appropriate.

The elegant matte-black rack-mount enclosures include a removable, transparent front panel inset which can be removed for access.

The C51 powers 200 and 300 Series Remote Active installation loudspeakers. It features active line-level crossovers, switched balanced and unbalanced inputs, and employs a powerful new amplifier design which enables multiple channels of high-level amplification to be combined in a compact unit without excessive heat.

Ten channels of approximately 100W into 8Ω (160W into 4Ω) RMS amplification are provided, grouped into five pairs, each providing bass and tweeter outputs from a full-range input.

The crossovers take the form of plug-in modules which can be inserted at the time of installation to configure the unit for the speakers in use. An appropriate card is supplied with each loudspeaker. Modules are currently available for the A320, A330 and A350, and each module includes a pair of LEDs that confirm the positive and negative power-rails are operative and identifies the crossover installed by means of the colour combination.

Thermal, short-circuit and DC fault protection circuitry is included. The C51 has soft start, fan output and trigger input.

The front panel includes five sockets for installation of the crossover cards, which can be accessed by unscrewing the transparent smoked access cover.

Front-panel indicators take the form of blue LEDs for main power and for each channel, arranged in high/low pairs so that the status can be instantly assessed.

The rear panel is divided into five channel pairs identified as HF (tweeter) and LF (bass). A single full-range input per channel pair may be switch-selected between unbalanced (gold-plated phono connector) and balanced (XLR3F).

In addition to the power input socket and power switch, the rear panel also offers a 3.5mm jack socket for connection of an industry standard trigger input (5–30V, AC or DC) for remote operation, and a 3.5mm jack socket for the connection of a 12V DC fan system. This output is controlled automatically according to temperature.

10-channel Active Speaker Power Unit for installation applications

10 x 100W/8Ω (160W/4Ω) power amps arranged in 5 HF/LF channel pairs

Line-level active crossover modules supplied with Meridian Active Installation loudspeakers

Attractively-finished 2U rack-mount form-factor

BOOTHROYD STUART
MERIDIAN[®]

www.meridian-audio.com

C51 Active Speaker Power Unit



C51 front and rear panels



Outline Specifications

C51 Powered Crossover/Amplifier

Output power	10 channels of 100W into 8Ω / 160W into 4Ω, arranged in 5 x HF/LF pairs sourced from full-range input via crossover module
Frequency response	+0/-3dB, 10Hz-50 kHz (modified by crossover characteristics)
Output impedance	20-150mΩ, 1-20kHz
THD+Noise	Typical: 0.1% @ 60W output, 0.008% @ 1W
Full-range Inputs	5 x Mono unbalanced (phono) impedance 10 kΩ 5 x Mono balanced (XLR3F) impedance 20 kΩ/leg Switch-selected between balanced and unbalanced
Outputs	LF and HF pairs of gold-plated binding posts per channel pair
Other connections	12vdc, 5W Temperature controlled fan output (3.5mm jack) 5-30V ac/dc trigger input (3.5mm jack)
Controls	Rear-panel balanced/unbalanced input switch per input. Rear panel main power switch.
Indicators	Blue LED power indicator Per-channel blue LED operation indicator
Power	100-240Vac, 30-1200VA
Dimensions	
Main enclosure	435 x 82 x 250 mm (17.25 x 3.25 x 9.75 in) W x H x D
Front panel	485 x 87.5 x 12 mm (19 x 3.45 x 0.5 in) W x H x D
Weight	TBC kg (xx lb)

Crossover cards

Cards are supplied with each active installation loudspeaker system. These feature premium quality Burr-Brown operational amplifiers and four-layer printed circuit boards. LEDs indicate presence of rail voltages while the colour combinations confirm the type of crossover in place. Cards plug into sockets on the front panel of the C51.

Meridian Audio reserves the right to amend product specifications at any time.

Meridian Audio Limited
Latham Road
Huntingdon
Cambridgeshire PE29 6YE
England

T +44 (0) 1480 445678
F +44 (0) 1480 445686

Meridian America Inc
8055 Troon Circle, Suite C
Austell, GA 30168-7849

T +1 (404) 344 7111
F +1 (404) 346 7111

BOOTHROYD STUART
MERIDIAN

www.meridian-audio.com

*This is a preliminary document and is subject to significant change without notice.
Meridian retains the right to improve or modify product specifications and design at any time. E&OE.*

C51 v0.92B Pxxxxx 20071119 • REF